

FOREST PEST MANAGEMENT

Technology Update_

Southern Region, USDA Forest Service, 1720 Peachtree Rd., N.W., At lata, Ga. 30367

Southern Pine Beetle Fact Sheet Number 29

A COMPUTERIZED LITERATURE RETRIEVAL SYSTEM FOR THE SOUTHERN PINE BEETLE

The IPM Program for Bark Beetles of Southern Pines is implementing technology developed during the Expanded Southern Pine Beetle Research Applications Program and the IPM Program. One of the objectives of the IPM Program is to provide information to a variety of users.

A reference library and computerized FAMULUS literature file has been set up and is being maintained at Stephen F. Austin State University (SFASU). file -- on a Honeywell CP6 computer -- is an interactive user-friendly system. FAMULUS, a personal documentation system for indexing and cross-listing reference articles, was developed specifically for cataloging and retrieving citations from the reprint files of a research scientist (Burton et al. 1971). The version of FAMULUS used in Texas consists of eight individual computer programs written in FORTRAN. These programs include:

- l. EDIT performs the primary datahandling and data-editing chores, including addition and deletion of citations, corrections, and changes in field labels.
- 2. SEARCH selects and prints citations using a SEARCH request with the following logical operators: OR, AND, and AND
- 3. GALLEY prints citations by field or in a bibliographic format.

- 4. SORT arranges citations in alphabetical or numerical order by fields or combinations of fields.
- MERGE combines sorted citations into groups.
- 6. INDEX produces an alphabetical list of words in fields by citation number.
- OSSIFY punches cards or creates computer input files.
- 3. VOCAB scans any field and compiles an alphabetical list of terms occurring in the field(s).

 These lists can be used to edit or construct SEARCH formulas.

The computerized FAMULUS System can be used either to store and retrieve citations or to prepare bibliographies for publication or special requests. An annotated bibliography, containing 1,235 articles, has been published. The text was transmitted via telecommunications to Lufkin, Tex., for printing using a Compugraphic Editwriter 7770II. The printed bibliography contains three indexes: AUTHOR (AUTH field), TAXONOMY (TAXO field), and KEYS (KEYS to subject field). These indexes can be used to reference articles either in the bibliography or the computerized FAMULUS file maintained at SFASU. Titles of articles are reproduced exactly as found in the original reference; thus, for example, Zimmermann, often spelled as Zimmerman, was not changed.

The annotated bibliography will be maintained and updated using the FAMULUS system at SFASU. Thus, the UPDATE file contains articles not available in the published bibliography. Requests for searches and/or articles can be forwarded to SFASU at the address of the author below. These will be processed at a nominal fee and returned by mail. The published bibliography (Kulhavy and Johnson 1983) is available for \$10 a copy from the School of Forestry, Stephen F. Austin State University, Nacogdoches, TX 75962. Telephone: (409) 569-3301.

REFERENCES

Burton, H.D.; Russel R. M.; Yerke, T.B. FAMULUS: A computer-based system for augmenting personal documentation efforts. Res.Note PSW-193. Berkeley, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Forest and Range Experiment Station; rev. 1971. 40 p.

Kulhavy, D.L.; Johnson, P.C. Southern Pine Beetle: annotated bibliography 1868-1982. Nacogdoches, TX: Center for Applied Studies, School of Forestry, Stephen F. Austin State University; 1983. 95 p.

Trade names are mentioned for the convenience of the reader and do not imply a warranty or recommendation by the U.S. Department of Agriculture over other products or firms not mentioned.

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